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## Child's Play: Striking a Balance

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The popular belief, drawing on the "You [need] to eat a peck of dirt before you die" idea that too much attention to hygiene may impede the development of natural protection, has been attracting scientific attention in the form of the so-called hygiene hypothesis. One would not want to pursue very far any analogy between the maturation of T-helper cell systems and children learning by hard experience the dangers that modern life presents, but could other types of overprotection, in the field of recreation for example, be risky also? Nervousness and uncertainty are beginning to affect those with responsibility for children's playgrounds, not least because of the lurking specters of litigation and compensation. If play is indeed an important part of child development and exercising, there is an unenviably difficult balance to be struck between risk and benefit.

Sometimes allowing caution to rule is eminently sensible. As a recent review from a UK specialist center for children's injuries puts it, "[playgrounds] do not need fall heights of over 4 metres and concrete surfaces to be exciting for children." Head injuries from playground falls have become rare with the introduction of impact-friendlier surfaces. From sport comes another example: rugby football, though lacking the sanctioned brutality of the American version, is a body-contact game, and youngsters taking it up these days are spared the more robust plays until they are older. Yet in the playground, broken arms persist. One suggested cause was increased obesity; obese children fall such that obese children are falling with greater force. If true, this explanation would be ironic since overweight children should benefit from exercise. However, the authors' reply makes this suggestion unlikely. So, what is the answer—deeper and deeper layers of bark, ever-lower monkey bars, more and more supervision, or even certificates of fitness to play, until upper-limb fracture rates have fallen to zero?

In urban areas, leisure space is at a premium, and it would be an added worry if children in the poorer parts of cities had restricted access to safe play areas. The evidence on this is conflicting. In this issue of *Journal of Urban Health*, Powell and colleagues<sup>7</sup> report that in Chicago, playgrounds and equipment were not perfect but were fairly safe, and playgrounds in very poor communities were not very different from those in slightly better-off areas. In New York and in Boston, however, the picture seems to be less encouraging.<sup>8,9</sup>

Norton and colleagues<sup>3</sup> have confirmed the lack of impact of surface improvements on broken bones and raised the question of the balance needed between playground safety and the benefits that play confers on the developing child. Two

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years earlier, a study commissioned for the UK Health and Safety Executive had stirred the debate by wondering whether all the attention paid to safety in this area had been worthwhile. 10 Perhaps if there had been more randomized controlled trials on playground safety measures, the evidence basis for policy would be clearer. Norton et al. found no such studies with injury as an endpoint and noted that "changes are unlikely to be made just for scientific study." The same seems to be true for injury prevention generally. A recent systematic review could draw no clear conclusions "from the limited number of studies of diverse design and rigor." With some exceptions, 12 we must settle for different and, arguably, weaker evidence. When the rate of deaths and injuries for children falling from windows in the Harlem district of New York City alarmed the authorities, the response, unsurprisingly, was not to call on scientists and tables of random numbers but to mount a cooperative community effort. In another article in this issue, Pressley and colleagues<sup>13</sup> describe the successful outcome of the Injury Free Coalition for Kids project and its extension to five other American cities. Some attention was paid to playground improvements, but injury rates from this source do not figure prominently in the article, suggesting that they were outnumbered by other types of accidental injury.

It is dangerous to argue that playground safety should now have a low priority because surfaces and equipment might then become neglected, thus undoing the gains that have been achieved. Also, there is a numerically serious injury burden from this source, and it may be getting worse. The statistics can be derived in several ways and it is not easy to make comparisons. The UK Child Accident Prevention Trust reckons that 184,847 children aged 15 or under went to hospital in 1999 because of an injury sustained in a playground but only 34,677 injuries were sustained in public play areas. The Royal Society for the Prevention of Accidents agrees (about 40,000), and its searchable website indicates that fall-related playground injuries increased from 2000 to 2001 and again the following year.

Thus, playgrounds remain potentially dangerous places—yet children need more recreational areas, not fewer. Here in the United Kingdom, many school-playing fields have been sold, and one reason may be the reluctance of teachers to supervise sporting activities generally. Powell et al. reveal a figure that could be just as important as the frequency of rusty playground equipment found in their survey: Chicagoans have only one-fifth of the nationally recommended 10 acres of recreational ground per 100,000 inhabitants. When the forensic literature professor Don Foster went to Vassar College, he noted that there they had 2 acres per student 17—so perhaps, after all, there are socioeconomic imbalances in provision as well as, possibly, in the quality of that provision.

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